

No.

9900074



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agricultural Research Service U.S. Department of Agriculture

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

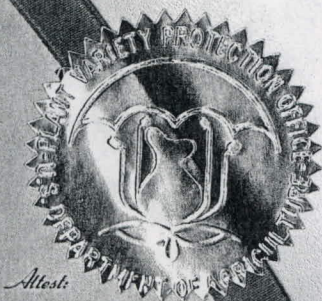
AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COWPEA

'Petite-N-Green'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this ninth day of February, in the year of our Lord two thousand one.



Attest:

*Alan R. Post*

Acting Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*[Signature]*

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Agricultural Research Service U.S. Department of Agriculture		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER US-861	3. VARIETY NAME Petite-N-Green
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 1400 Independence Ave., S.W. Washington, DC 20250-0302 USA		5. TELEPHONE (include area code) (301) 504-6532	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER 99000074 DATE 11/13/98 FILING 11/13/98 FILING AND EXAMINATION FEE: \$ 2450. <sup>00</sup> DATE 11/13/98 CERTIFICATION FEE: \$ 320. <sup>00</sup> DATE 10/25/00
7. GENUS AND SPECIES NAME Vigna unguiculata		6. FAX (include area code) (301) 504-5060	
9. CROP KIND NAME (Common name) Cowpea		8. FAMILY NAME (Botanical) Leguminosae	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) U. S. Government		11. IF INCORPORATED, GIVE STATE OF INCORPORATION N/A	
12. DATE OF INCORPORATION N/A		13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Willard J. Phelps 10300 Baltimore Blvd., Bldg. 005 Beltsville, MD 20705-2350	
14. TELEPHONE (include area code) (301) 504-6532		15. FAX (include area code) (301) 504-5060	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (If "yes," give names of countries and dates) <input checked="" type="checkbox"/> NO			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.			
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) Richard L. Fery		SIGNATURE OF APPLICANT (Owner(s)) Roger H. Lawson	
NAME (Please print or type) RICHARD L. FERY		NAME (Please print or type) ROGER H. LAWSON	
CAPACITY OR TITLE Research Geneticist	DATE 8 June 1998	CAPACITY OR TITLE National Program Leader Horticulture & Sugar Crops	DATE



**Exhibit A: Origin and Breeding History of the Variety**

'Petite-N-Green' was developed over an eight-year period using a pedigree breeding procedure that included a single cross and repeated single-plant selections (Attachment 1 to Exhibit A). The cross involved 'Bettergreen', a cream-type pea with green cotyledons, and 'Coronet', a pinkeye-type cultivar with cream-colored cotyledons. The green cotyledon trait is conditioned by a single recessive gene, symbolized *gc* (Attachment 2 to Exhibit A). Intense selection pressure was applied in the  $F_2$  through  $F_9$  generations for the green cotyledon phenotype and the following horticultural characteristics: plant habit (procumbent, similar to 'Coronet'), maturity (days to harvest), pod placement (at foliage level or above), pod shape (slightly curved), color of mature pod (dark purple), pod fill (minimal seed abortion), concentration of pod set (a single harvest must remove most of the pod load), seed shape (ovate to kidney), seed coat pattern (small eye), eye color (pink), texture of dry testa (smooth), seed size, seed germination, hardiness of seed coat (dry seed must imbibe water readily), pod yield, and seed yield. 'Petite-N-Green' originated as a bulk of an  $F_9$  population grown in 1994.

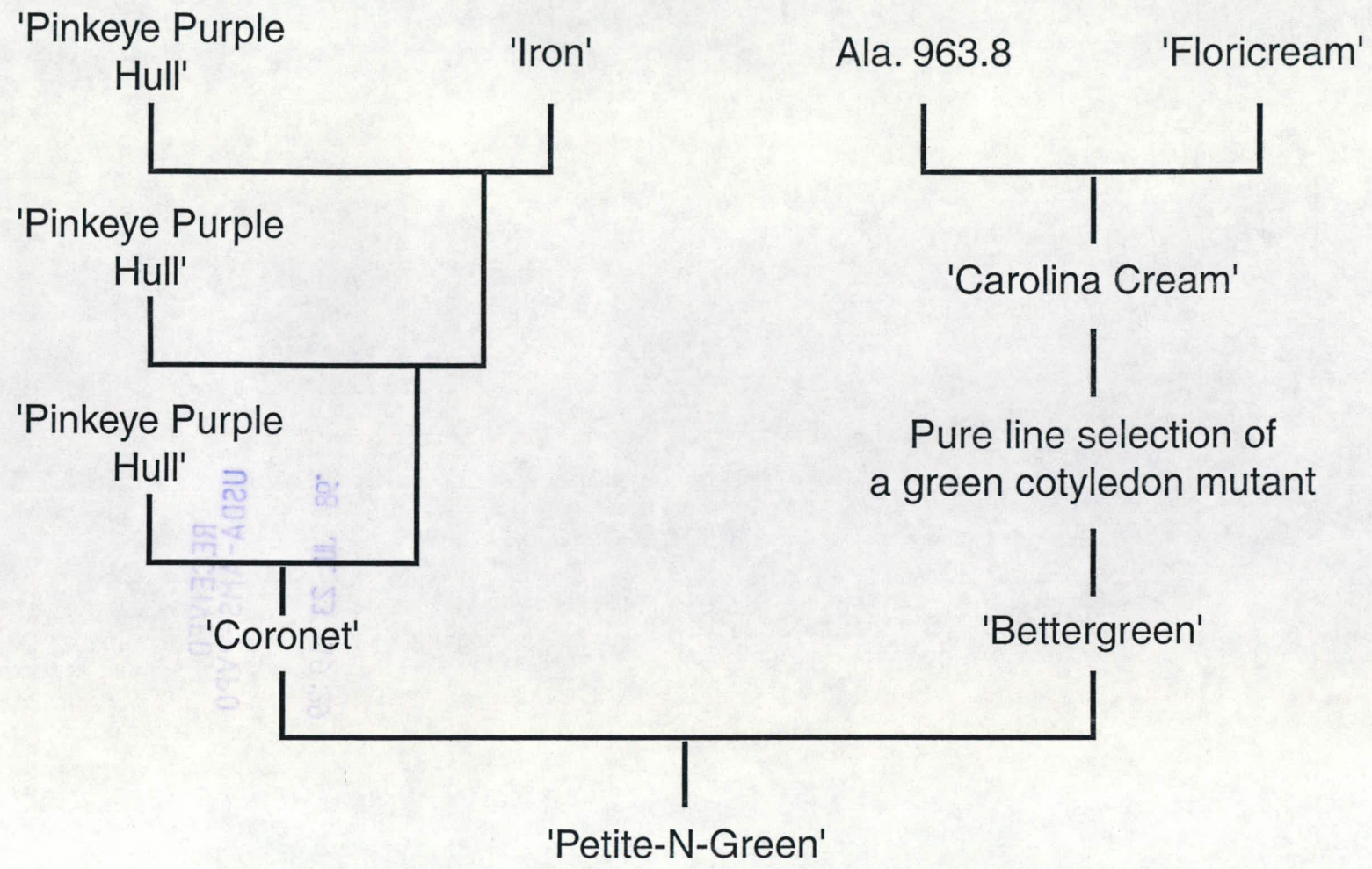
'Petite-N-Green' appeared stable and uniform through three generations of selfing during the seed increase process. The appearance of off-types was not a problem.

- |               |   |
|---------------|---|
| Attachment 1. | Pedigree of 'Petite-N-Green'.   |
| Attachment 2. | Fery, R. L., and P. D. Dukes. 1994. Genetic analysis of the green cotyledon trait in southernpea [ <i>Vigna unguiculata</i> (L.) Walp.]. J. Amer. Soc. Hort. Sci. 119(5):1054-1056. |

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**Exhibit B: Statement of Distinctness**

'Petite-N-Green' is most similar to 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR'. 'Petite-N-Green' differs from 'Charleston Greenpack' in having distinctly smaller seed \*(11.5 to 20.5% less mass per 100 seeds), a distinctly different pea shape (ovate rather than kidney), and distinctly less pigmentation on the stems and branches (only slight to moderate pigmentation at the bases and tips rather than extensive pigmentation over the entire plant part). 'Petite-N-Green' differs from 'Coronet' and 'Pinkeye Purple Hull-BVR' and all other pinkeye-type cultivars except 'Charleston Greenpack' in having green-colored cotyledons. 'Petite-N-Green' and 'Charleston Greenpack' are homozygous at the *green cotyledon* locus for the recessive allele conditioning green-colored cotyledons (genotype: *gc/gc*). 'Coronet', 'Pinkeye Purple Hull-BVR', and all other pinkeye-type cultivars except 'Charleston Greenpack' and 'Petite-N-Green' are homozygous at the *green cotyledon* locus for the dominant allele conditioning cream-colored cotyledons (genotype: *Gc/Gc*). Seed coats and cotyledons of field-grown 'Charleston Greenpack' and 'Petite-N-Green' peas harvested at dry-stage maturity are light olive in color \*\*(Munsell rating: 7.5 Y 7/4). In comparison, seed coats and cotyledons of 'Coronet' and 'Pinkeye Purple Hull-BVR' peas harvested at similar maturity have a cream color (Munsell rating: 2.5 Y 8/4). Dry 'Charleston Greenpack' and 'Petite-N-Green' peas imbibed to restore fresh-harvest seed size and blanched in boiling water for three minutes exhibit a "fresher" color than dry seeds. Imbibed and blanched 'Charleston Greenpack' and 'Petite-N-Green' peas have a near-fresh green color (Munsell rating: 10 Y 7/4); similarly treated 'Coronet' and 'Pinkeye Purple Hull-BVR' peas have a cream color (Munsell rating: 5 Y 8/2).

\*Tables showing data for various seed size characteristics are attached to Exhibit D.

\*\*Munsell Color. 1990. Munsell book of color: Glossy finish collection. Munsell Color, Baltimore, Maryland.

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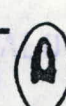

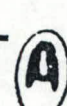
U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
BELTSVILLE, MARYLAND 20705  
OBJECTIVE DESCRIPTION OF VARIETY  
(Cowpea)

9900074

INSTRUCTIONS: See Reverse

NAME OF APPLICANT(S) Agricultural Research Service U.S. Department of Agriculture	VARIETY NAME OR TEMPORARY DESIGNATION Petite-N-Green
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) 1400 Independence Ave., S.W. Washington, DC 20250-0302	FOR OFFICIAL USE ONLY PVPO NUMBER

Place the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g.  or ) when number is either 99 or less.

1. PLANT HABIT AT GREEN SHELL STAGE: <input type="text" value="3"/> 1 = ERECT    2 = SEMIERECT    3 = PROCUMBENT 4 = PROSTRATE		2. PLANT SIZE: <input type="text" value="5"/> <input type="text" value="0"/> CM. HIGH AT MATURITY											
3. STEM COLOR: <input type="text" value="1"/> 1 = GREEN    2 = PURPLE		4. NODE COLOR: <input type="text" value="2"/> 1 = GREEN    2 = PURPLE											
5. FOLIAGE: <input type="text" value="1"/> 1 = OPEN    2 = COMPACT		6. LEAF COLOR (See Reverse): <input type="text" value="2"/> 1 = LIGHT GREEN    2 = MEDIUM GREEN    3 = DARK GREEN											
7. LEAF SURFACE: <input type="text" value="1"/> 1 = SMOOTH    2 = BLISTERED		<input type="text" value="1"/> 1 = DULL    2 = GLOSSY											
8. FLOWER COLOR (See Reverse) <i>3MP 10/10/00 PER LETTER</i> <input checked="" type="text" value="2"/> 1 = PURPLE    2 = LAVENDER    3 = TINGED 4 = WHITE <i>5 = VIOLET</i>		9. FIRST FLOWERING <input type="text" value="4"/> <input type="text" value="5"/> NUMBER OF DAYS											
10. POD: <input type="text" value="3"/> PLACEMENT: 1 = BELOW FOLIAGE    2 = ABOVE FOLIAGE 3 = AT FOLIAGE LEVEL <input type="text" value="1"/> <input type="text" value="4"/> CM. LONG <input type="text" value="7"/> MM. WIDE <input type="text" value="2"/> CONstrictions: 1 = NONE    2 = SLIGHT    3 = DEEP <input type="text" value="4"/> COLOR (Green shell maturity): 1 = SILVER-GREEN    2 = GREEN    3 = LIGHT PURPLE    4 = DARK PURPLE <input checked="" type="text" value="4"/> COLOR (Dry maturity): 1 = WHITE    2 = STRAW    3 = DRAB    4 = PURPLE <i>5 = DARK PURPLE 3MP 10/10/00 PER LETTER</i> <input type="text" value="2"/> CROSS SECTION (Green shell stage-width/height): 1 = (1: <)    2 = (1: >)    3 = (1: 1)		<input type="text" value="1"/> LOCATION: 1 = SCATTERED    2 = BUNCHED <input type="text" value="2"/> CURVATURE: 1 = STRAIGHT    2 = CURVED <input type="text" value="2"/> SURFACE (Green shell maturity): 1 = DULL    2 = GLOSSY											
11. SEED: DRY <input type="text" value="1"/> <input type="text" value="4"/> NUMBER OF SEEDS PER POD <input type="text" value="2"/> SHAPE (See Reverse): 1 = KIDNEY    2 = OVATE TO OVOID    3 = CROWDER 4 = GLOBOSE    5 = RHOMBOID <input type="text" value="7"/> MM. LONG <input type="text" value="5"/> MM. WIDE <input type="text" value="5"/> HILAR EYE TYPE: <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="8"/> GM. PER 1000 SEEDS													
<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div>  SPECKLED         </div> <div>  BLOTCH         </div> <div>  NARROW         </div> <div>  BIG         </div> <div>  SMALL         </div> <div>  VERY SMALL         </div> </div>													
<input type="text" value="2"/> COAT: 1 = WRINKLED    2 = SMOOTH <input type="text" value="1"/> COLOR PATTERN: 1 = SINGLE COLOR    2 = PATTERNED    3 = MARBLED 4 = SPECKLED <input type="text" value="10"/> PRIMARY COLOR (Single color or basic color): 1 = PURPLE    2 = BLACK    3 = DULL BLACK    4 = BLUE    5 = RED    10 = green 6 = COFFEE    7 = MAROON    8 = BUFF OR CLAY    9 = PINK    0 = WHITE													
SECONDARY COLORS PRODUCING THE PATTERN, MARBLING OR SPECKLING (Enter a zero in boxes where the colors do not identify the secondary colors.):													
<table border="0"> <tr> <td><input type="text" value="0"/> 1 = PURPLE</td> <td><input type="text" value="0"/> 2 = BLACK</td> <td><input type="text" value="0"/> 3 = DULL BLACK</td> <td><input type="text" value="0"/> 4 = BLUE</td> <td><input type="text" value="0"/> 5 = RED</td> </tr> <tr> <td><input type="text" value="0"/> 6 = COFFEE</td> <td><input type="text" value="0"/> 7 = MAROON</td> <td><input type="text" value="0"/> 8 = BUFF</td> <td><input checked="" type="text" value="X"/> 9 = PINK</td> <td><input type="text" value="0"/> 0 = WHITE</td> </tr> </table>				<input type="text" value="0"/> 1 = PURPLE	<input type="text" value="0"/> 2 = BLACK	<input type="text" value="0"/> 3 = DULL BLACK	<input type="text" value="0"/> 4 = BLUE	<input type="text" value="0"/> 5 = RED	<input type="text" value="0"/> 6 = COFFEE	<input type="text" value="0"/> 7 = MAROON	<input type="text" value="0"/> 8 = BUFF	<input checked="" type="text" value="X"/> 9 = PINK	<input type="text" value="0"/> 0 = WHITE
<input type="text" value="0"/> 1 = PURPLE	<input type="text" value="0"/> 2 = BLACK	<input type="text" value="0"/> 3 = DULL BLACK	<input type="text" value="0"/> 4 = BLUE	<input type="text" value="0"/> 5 = RED									
<input type="text" value="0"/> 6 = COFFEE	<input type="text" value="0"/> 7 = MAROON	<input type="text" value="0"/> 8 = BUFF	<input checked="" type="text" value="X"/> 9 = PINK	<input type="text" value="0"/> 0 = WHITE									



## 12. DISEASE (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 0 FUSARIUM WILT	<input type="checkbox"/> 1 ROOT KNOT NEMATODE	<input type="checkbox"/> 0 CHARCOAL ROT	<input type="checkbox"/> 0 ZONATE LEAF SPOT
<input type="checkbox"/> 0 RED LEAF SPOT	<input type="checkbox"/> 0 POWDERY MILDEW	<input type="checkbox"/> 0 COWPEA CHLOROTIC MOTTLE VIRUS	<input type="checkbox"/> 0 SOUTHERN BEAN MOSAIC VIRUS
<input type="checkbox"/> 0 BEAN YELLOW MOSAIC VIRUS	<input type="checkbox"/> 0 CUCUMBER MOSAIC VIRUS	<input type="checkbox"/> 0 BEAN POD MOTTLE VIRUS	<input type="checkbox"/> 0 SOYBEAN CYST NEMATODE
<input type="checkbox"/> 0 COWPEA YELLOW MOSAIC VIRUS	<input type="checkbox"/> 0 BACTERIAL CANKER	<input type="checkbox"/> 0 CERCOSPORA LEAF SPOT	<input type="checkbox"/> 0 STING NEMATODE
<input type="checkbox"/> 0 RUST	<input type="checkbox"/> 0 SOUTHERN BLIGHT	<input type="checkbox"/> 0 ROOT ROT	<input type="checkbox"/> 1 Blackeye Cowpea OTHER (Specify) <u>Mosaic Virus</u>

## 13. INSECT (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 0 MEXICAN BEAN BEETLE	<input type="checkbox"/> 0 COWPEA APHID	<input type="checkbox"/> 0 COWPEA CURCULIO	<input type="checkbox"/> 0 STINK BUGS
<input type="checkbox"/> 0 LESSER CORNSTALK BORER	<input type="checkbox"/> 0 EUROPEAN CORNBORER	<input type="checkbox"/> 0 CORN EARWORM	<input type="checkbox"/> 0 BEET ARMYWORM
<input type="checkbox"/> 0 THRIPS	<input type="checkbox"/> 0 SERPENTINE LEAF MINERS	<input type="checkbox"/> 0 OTHER (Specify) _____	

## 14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant size	coronet	Plant habit	coronet
Pod size	coronet	Plant pigmentation	No known similar variety
No. days to maturity	coronet	Seed coloration	Charleston Greenpack

## INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

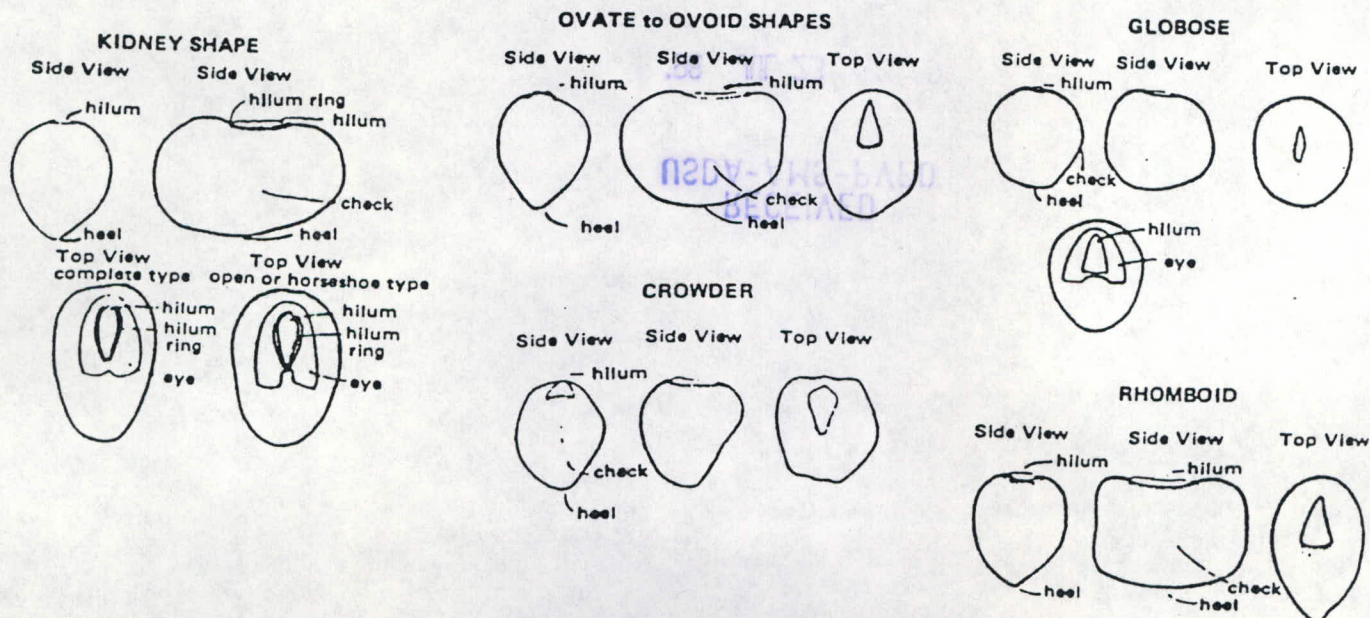
1. C. V. Piper, 1912, Agricultural Varieties of Cowpea and Related Species, U.S.D.A., Bulletin No. 229.
2. L. L. Ligon, 1958, Characteristics of Cowpea Varieties, Oklahoma State University, Bulletin B-518.
3. W. J. Spillman and W. J. Sando, 1929, Mendelian Factors in the Cowpea, papers of the Michigan Academy of Science, Arts and Letters, Vol. XI.

LEAF COLOR: Any recognized color chart may be used to determine the leaf color of the described variety. The following cowpea varieties may be used as a guide to identify colors listed:

1. Light Green - Texas Cream 40
2. Medium Green - Big Boy
3. Dark Green - California Blackeye #5.

FLOWER COLOR: White flower should be treated with a one percent solution of hydrochloric acid to determine if anthocyanin is present. If color appears as a result of the test, classify as tinged.

## TERMS USED TO DESCRIBE SHAPES:





**Exhibit D: Additional Description of the Variety**

'Petite-N-Green' is a pinkeye-type cowpea, *Vigna unguiculata* (L.) Walp., developed for use as a home garden variety. 'Petite-N-Green' can be harvested at the dry stage of maturity without loss of the pea's fresh green color.

Results of replicated spring and summer field tests conducted at Charleston, S.C., during 1996 and 1997 indicate that 'Petite-N-Green' yields are usually comparable to 'Charleston Greenpack' and 'Coronet' yields, and comparable to or better than 'Pinkeye Purple Hull-BVR' yields (Attachment 1 to Exhibit D).

'Petite-N-Green' flowers three days later than 'Charleston Greenpack' and 2 days later than 'Coronet' and 'Pinkeye Purple Hull-BVR' (Attachment 2 to Exhibit D).

'Petite-N-Green' typical matures four to seven days later than 'Charleston Greenpack' and two to nine days later than 'Coronet' or 'Pinkeye Purple Hull-BVR' (Attachment 1 to Exhibit D).

'Petite-N-Green' has a low bush plant habit similar to that of 'Coronet'. It has a more procumbent vine than 'Charleston Greenpack' (Attachment 3 to Exhibit D).

'Petite-N-Green' has extensive pigmentation (purple) on the peduncles; the stems, branches, and petioles contain slight to moderate pigmentation at the bases and tips.

~~THE FLOWERS ARE LIGHTLY PIGMENTED;~~

Flower color is predominately white; the upper, inside margin of the standard is lightly pigmented (violet), the base of the standard is yellow, and the wing is pigmented (violet) on the back surface.

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Pod set is concentrated, and the pods are borne at foliage level in a scattered fashion.

Dry pods are attached to the peduncles in a pendant manner, and each peduncle typically produces two pods.

'Petite-N-Green' pods are smaller (length and height) than 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' pods (Attachments 3 and 4 to Exhibit D).

'Petite-N-Green' pods contain more peas than 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' pods (Attachment 3 to Exhibit D).

Pod color is green when immature, dark purple when ready for mature-green harvest, and dark purple when dry. The upper sutures and tips of immature pods are pigmented.



Fresh peas have a pink eye, quite similar to those of 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR'.

Dry peas have a smooth seed coat.

'Petite-N-Green' peas are significantly smaller than 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' peas -- the mass per 100 seeds and the seed length are less (Attachments 1, 4, and 5 to Exhibit D).

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|---------------|---|
| Attachment 1. | <i>Table 1.</i> Number of days to harvest, machine shellout, mass per 100 dry peas, and dry pea yields for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas grown in spring and summer plantings, Charleston, S.C., 1996 and 1997. |
| Attachment 2. | <i>Table 2.</i> Number of days to flowering for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997.  |
| Attachment 3. | <i>Table 3.</i> Plant height, plant width, peduncle length, pod length, and number of peas per pod for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997.   |
| Attachment 4. | <i>Table 4.</i> Fresh pod and pea characteristics of 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997.   |
| Attachment 5. | <i>Table 5.</i> Dry pea characteristics of 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997.   |

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Table 1. Number of days to harvest, machine shellout, mass per 100 dry peas, and dry pea yields for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas grown in spring and summer plantings, Charleston, S.C., 1996 and 1997<sup>a</sup>.

Cultivar	Days to harvest (no.)	Machine shellout (%) <sup>y</sup>	Mass/100 dry peas (g)	Dry pea yield (kg.ha <sup>-1</sup> )
<i>Spring 1996</i>				
Petite-N-Green	71.0 a <sup>x</sup>	80.7 a	10.3 b	1,121 a
Charleston Greenpack	67.0 a	78.2 b	12.9 a	978 a
Coronet	66.4 a	79.8 a	13.1 a	1,175 a
Pinkeye Purple Hull-BVR	66.0 a	76.9 c	13.4 a	1,259 a
<i>Summer 1996</i>				
Petite-N-Green	69.6 a	75.7 b	9.7 c	699 a
Charleston Greenpack	62.4 b	79.1 a	12.2 a	586 a
Coronet	67.8 a	71.6 c	11.1 b	548 a
Pinkeye Purple Hull-BVR	68.0 a	72.9 bc	11.6 ab	586 a
<i>Spring 1997</i>				
Petite-N-Green	70.0 a	79.6 a	10.1 c	761 b
Charleston Greenpack	65.0 c	78.1 b	12.6 b	967 a
Coronet	66.2 b	78.9 ab	13.4 a	971 a
Pinkeye Purple Hull-BVR	66.9 b	74.1 c	13.3 a	732 b
<i>Summer 1997</i>				
Petite-N-Green	75.8 a	80.0 a	13.1 b	719 ab
Charleston Greenpack	68.6 b	77.6 a	14.8 a	592 b
Coronet	67.6 b	78.2 a	14.7 a	869 a
Pinkeye Purple Hull-BVR	66.6 b	74.4 b	14.9 a	596 b

<sup>a</sup>Spring and summer 1996 tests planted on 23 May and 2 July, respectively. Spring and summer 1997 tests planted on 2 June and 25 June, respectively. The experimental design of each test was a randomized complete block with 5 (1996) or 10 replications (1997). Each plot was space-planted, 18 hills per plot, three seeds per hill, 30 cm between hills, and 102 cm between rows. Single harvest of dry pods.

<sup>y</sup>Percentage of dry seed obtained from machine-shelled sample of dry pods [(mass of dry seed/mass of dry pods) x 100].

<sup>x</sup>Mean separation within columns by Duncan's multiple range test at  $P \leq 0.05$ .



Table 2. Number of days to flowering for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997<sup>z</sup>.

Cultivar	Days to flowering (no.)
Petite-N-Green	45.0 a
Charleston Greenpack	42.1 c
Coronet	43.3 b
Pinkeye Purple Hull-BVR	42.9 b

<sup>z</sup>Replicated spring test.

<sup>y</sup>Mean separation within columns by Duncan's multiple range test at  $P \leq 0.05$ .

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Table 3. Plant height, plant width, peduncle length, pod length, and number of peas per pod for 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997.

Cultivar	Plant height (cm) <sup>z</sup>	Plant width (cm) <sup>z</sup>	Peduncle length (cm) <sup>z</sup>	Pod length (cm) <sup>y</sup>	Peas/ pod (no.) <sup>y</sup>
Petite-N-Green	49.8 a*	79.3 a	35.5 a	14.4 c	13.7 a
Charleston Greenpack	47.9 a	67.2 c	34.1 a	15.3 b	11.6 b
Coronet	51.3 a	76.3 a	36.6 a	15.1 b	11.5 b
Pinkeye Purple Hull-BVR	47.8 a	71.0 b	36.0 a	16.0 a	11.1 b

<sup>z</sup>Spring test.

<sup>y</sup>Summer test.

\*Mean separation within columns by Duncan's multiple range test at  $P \leq 0.05$ .

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Table 4. Fresh pod and pea characteristics of 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997<sup>2</sup>.

Cultivar	Fresh pods		Fresh peas		Mass/ 100 peas (g)
	Width (mm)	Height (mm)	Length (mm)	Width (mm)	
Petite-N-Green	7.2 b <sup>2</sup>	8.1 b	8.7 b	7.6 b	28.5 b
Charleston Greenpack	7.4 ab	8.9 a	10.3 a	7.4 ab	31.6 a
Coronet	7.2 b	8.9 a	10.3 a	7.2 b	33.5 a
Pinkeye Purple Hull-BVR	7.6 a	8.9 a	10.5 a	7.6 a	31.8 a

<sup>2</sup>Fresh pods and peas harvested from replicated summer test.

<sup>2</sup>Mean separation within columns by Duncan's multiple range test at  $P \leq 0.05$ .

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Table 5. Dry pea characteristics of 'Petite-N-Green', 'Charleston Greenpack', 'Coronet', and 'Pinkeye Purple Hull-BVR' southernpeas, Charleston, S.C., 1997<sup>2</sup>.

Cultivar	Width (mm)	Length (mm)
Petite-N-Green	4.95 a <sup>y</sup>	6.61 c
Charleston Greenpack	4.55 b	7.68 b
Coronet	4.63 b	7.79 b
Pinkeye Purple Hull-BVR	4.56 b	7.98 a

<sup>2</sup>Dry peas harvested from replicated summer test.

<sup>y</sup>Mean separation within columns by Duncan's multiple range test at  $P \leq 0.05$ .

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FORM APPROVED - OMB NO. 0581-0055

EXPIRES: 12-31-96

U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Agricultural Research Service U.S. Department of Agriculture	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER US-861	3. VARIETY NAME Petite-N-Green
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 1400 Independence Ave., S.W. Washington, DC 20250-0302 USA	5. TELEPHONE (include area code) (301) 504-6532 7. PVPO NUMBER	6. FAX (include area code) (301) 504-5060

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country \_\_\_\_\_

☒ YES☐ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country \_\_\_\_\_

☒ YES☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country U.S. Department of Agriculture, ARS

11. Additional explanation on ownership (If needed, use reverse for extra space):

N/A

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

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